

What is claimed is:

1. A folded type mobile communication terminal apparatus comprising:

a receiving section which receives a call or an e-mail from a counter end;

5 a main display unit provided on an inner
surface exposed when said mobile communication
terminal is in an opened state;

an external display unit provided on an outer surface exposed when said mobile communication terminal is in a closed state;

a driver section which drives said main display unit and said external display unit;

a control circuit which controls said driver section such that data relating to the reception of
15 said call or said e-mail and data of said received call or e-mail are displayed on said main display unit in said opened state of said mobile communication terminal and on said external display unit in said closed state of said mobile communication terminal.

2. The folded type mobile communication terminal according to claim 1, wherein said control circuit automatically controls said driver section such that said data relating to the reception of said call or said e-mail is displayed on said main display unit in said opened state of said mobile communication

terminal and on said external display unit in said closed state of said mobile communication terminal, in response to the reception of said call or said e-mail.

3. The folded type mobile communication terminal according to claim 2, wherein said control circuit controls said driver section such that a symbol indicative of the reception of said call is displayed on said main display unit in said opened state of said mobile communication terminal and on said external display unit in said closed state of said mobile communication terminal in place of said data relating to the reception of said call, when a predetermined time period passes away without a replay to said received call by a user after the display of said data relating to the reception of said call or said e-mail is started.

4. The folded type mobile communication terminal according to claims 3, wherein said predetermined time period is variable and can be set by the user.

5. The folded type mobile communication terminal according to claim 1, further comprising a memory, and wherein said control circuit stores said data of said received call which is not replied by a user in said memory as non-replied call data.

6. The folded type mobile communication terminal according to claim 5, further comprising an outer key section provided on the outer surface of said mobile communication terminal in said closed state, and

5 wherein said control circuit reads out said non-reply call data from said memory in response to a non-replied call data display instruction inputted from said outer key section, and controls said driver section such that said read-out non-reply call data
10 are displayed on said main display unit in said opened state of said mobile communication terminal and on said external display unit in said closed state of said mobile communication terminal.

7. The folded type mobile communication terminal according to claim 6, wherein said control circuit controls said driver section such that said read-out non-reply call data are scrolled and displayed on said
5 main display unit in said opened state of said mobile communication terminal and on said external display unit in said closed state of said mobile communication terminal, in response to a scroll instruction inputted from said outer key section.

8. The folded type mobile communication terminal according to claim 6, wherein said control circuit controls said driver section such that said read-out

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non-reply call data are displayed one by one on said
5 main display unit in said opened state of said mobile
communication terminal and on said external display
unit in said closed state of said mobile communication
terminal, in response to a display switch instruction
inputted from said outer key section.

9. The folded type mobile communication terminal
according to claim 1, further comprising an outer key
section provided on the outer surface of said mobile
communication terminal in said closed state, and

5 wherein said control circuit controls said
driver section in response to an e-mail display
instruction inputted from said outer key section, such
that said data of said e-mail is displayed on said
main display unit in said opened state of said mobile
10 communication terminal and on said external display
unit in said closed state of said mobile communication
terminal.

10. The folded type mobile communication terminal
according to claim 1, wherein said data of said
received call includes at least one of a phone number
of said counter end, a name of said counter end, and a
5 reception date and time of said received call.

11. The folded type mobile communication terminal

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according to claim 10, further comprising a memory
which stores sets of a name and said counter end, and

wherein said control circuit extracts said name
5 from said memory based on said phone number contained
in said received call and drives said driver section
such that said extracted name is displayed.

12. The folded type mobile communication terminal according to claim 1, wherein said data of said received e-mail includes at least one of a mail address of a transmitter of said received e-mail, a name of said transmitter, a reception date and time of said received call, a title of said received e-mail, and main sentences of said received e-mail.

13. The folded type mobile communication terminal according to claim 12, further comprising a memory which stores sets of a name and mail address of said transmitter, and

5 wherein said control circuit extracts said name from said memory based on said mail address contained in said received e-mail and drives said driver section such that said extracted name is displayed.

14. The folded type mobile communication terminal according to claim 1, further comprising:

a state detecting unit which detects whether

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said mobile communication terminal is in said opened
5 state or in said closed state, and generates an opened
state detection signal when said mobile communication
terminal is in said opened state and a closed state
detection signal when said mobile communication
terminal is in said closed state, and

10 wherein said control circuit drives said driver
section such that a display operation is carried out
by said main display unit based on said opened state
detection signal, and by said external display unit
based on said closed state detection signal.

15. The folded type mobile communication terminal
according to claim 14, wherein said drive section
comprises:

a first driver for said main display unit; and
5 a second driver for said external display unit,
and wherein

said control circuit drives said first driver
based on said opened state detection signal and said
second driver based on said closed state detection
10 signal.

16. The folded type mobile communication terminal
according to claim 14, wherein said drive section
comprises:

a driver for said main display unit and said

5 external display unit;

a first switch provided between said driver and said main display unit to connect said driver to said main display unit based on said opened state detection signal; and

10 a second switch provided between said driver and said external display unit to connect said driver to said external display unit based on said closed state detection signal, and

said control circuit carries out the display
15 control to said driver.

17. The folded type mobile communication terminal according to claim 16, wherein the number of digits displayed on said main display unit is same as the number of digits displayed on said external display
5 unit.

18. A method of using a folded type mobile communication terminal apparatus, comprising the steps of:

(a) receiving a call or an e-mail from a
5 counter end;

(b) detecting whether said mobile communication terminal is in an opened state or in a closed state; and

(c) carrying out a display control such that

10 data relating to the reception of said call or said e-mail and data of said received call or e-mail are displayed on a main display unit based on said opened state detection signal and on a external display unit based on said closed state detection signal, and
15 wherein said main display unit is provided on an inner surface exposed when said mobile communication terminal is in said opened state, and said external display unit is provided on an outer surface exposed when said mobile communication
20 terminal is in said closed state.

19. The method according to claim 18, wherein said (c) carrying out step comprises the steps of:

determining whether said mobile communication terminal is in said closed state or in said opened
5 state, based on the detecting result of said (b) detecting step;

driving a first driver for said main display unit when said mobile communication terminal is in said opened state; and

10 driving a second driver for said external display unit when said mobile communication terminal is in said closed state.

20. The method according to claim 18, wherein said (c) carrying out step comprises the steps of:

driving a driver for said main display unit and
said external display unit for the display control;

5 connecting said driver to said main display
unit when said mobile communication terminal is in
said opened state; and

connecting said driver to said external display
unit when said mobile communication terminal is in
10 said closed state.

21. The method according to claim 18, wherein said
(c) carrying out step comprises the step of:

carrying out the display control such that a
symbol indicative of the reception of said call or
5 said e-mail is displayed on said main display unit
displays in said opened state of said mobile
communication terminal and on said external display
unit in said closed state of said mobile communication
terminal in place of said data relating to the
10 reception of said call, when a predetermined time
period passes away without a replay to said received
call by a user after the display of said data relating
to the reception of said call or said e-mail is
started.

22. The method according to claim 21, wherein said
(c) carrying out step comprises the steps of:

storing said data of said received call which

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is not replied by a user in a memory as non-replied
5 call data;

reading out said non-reply call data from said
memory in response to a non-replied call data display
instruction inputted from an outer key section
provided said outer surface of said mobile
10 communication terminal in said closed state; and

carrying out the display control such that said
read-out non-reply call data are displayed on said
main display unit in said opened state of said mobile
communication terminal and on said external display
15 unit in said closed state of said mobile communication
terminal.

23. The method according to claim 22, wherein said
(c) carrying out step comprises the step of:

carrying out the display control such that said
read-out non-reply call data are scrolled and
5 displayed on said main display unit in said opened
state of said mobile communication terminal and on
said external display unit in said closed state of
said mobile communication terminal, in response to a
scroll instruction inputted from said outer key
10 section.

24. The method according to claim 22, wherein said
(c) carrying out step comprises the step of:

carrying out the display control such that said
read-out non-reply call data are displayed one by one
5 on said main display unit in said opened state of said
mobile communication terminal and on said external
display unit in said closed state of said mobile
communication terminal, in response to a display
switch instruction inputted from said outer key
10 section.

25. The method according to claim 18, wherein said
(c) carrying out step comprises the step of:

carrying out the display control in response to
an e-mail display instruction such that said data of
5 said e-mail is displayed on said main display unit in
said opened state of said mobile communication
terminal and on said external display unit in said
closed state of said mobile communication terminal.

26. The method according to claim 18, wherein said
data of said received call includes at least one of a
phone number of said counter end, a name of said
counter end, and a reception date and time of said
5 received call.

27. The method according to claim 18, wherein said
data of said received e-mail includes at least one of
a mail address of a transmitter of said received e-

mail, a name of said transmitter, a reception date and
5 time of said received call, a title of said received
e-mail, and main sentences of said received e-mail.

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